



**FEDERAL AVIATION ADMINISTRATION
AIRWORTHINESS DIRECTIVES
SMALL AIRCRAFT, ROTORCRAFT, GLIDERS,
BALLOONS, & AIRSHIPS**

BIWEEKLY 2006-10

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SMALL AIRCRAFT, ROTORCRAFT, GLIDERS, BALLOONS, & AIRSHIPS

AD No.	Information	Manufacturer	Applicability
Info: E - Emergency; COR - Correction; S - Supersedes; R - Revision; - See AD for additional information;			
Biweekly 2006-01			
2005-26-10		Engine Components Inc.	See AD
2005-26-11		DG Flugzeugbau GmbH	Sailplane: DG-800B and DG-500MB
2005-26-12	S 2004-08-13	Burkhardt Grob Luft-Und Raumfahrt GmbH & Co Kg	Sailplane: G103 Twin Astir, G103 Twin II, G103A Twin 11 Acro, G103C Twin III Acro, and G 103 Twin III SL
2005-26-13	S 2002-22-11	Turbomeca	Engine: Artouste III B, B1, and D turboshaft
2005-26-14		Burkhardt Grob Luft-Und Raumfahrt GmbH & Co Kg	Sailplane: G103 Twin Astir
2005-26-53	E	Pacific Aerospace Corporation	750XL
Biweekly 2006-02			
2001-08-14R1	R 2001-08-14	Turbomeca S.A.	Engine: Arrius Models 2B, 2B1, and 2F
2005-24-10		American Champion Aircraft Corp.	7ECA, 7GCAA, 7GCBC, 8KCAB, and 8GCBC, 7AC, 7ACA, S7AC, 7BCM, 7CCM, S7CCM, 7DC, S7DC, 7EC, S7EC, 7ECA, 7FC, 7GC, 7GCA, 7GCAA, 7GCB, 7GCB, 7GCBC, 7HC, 7JC, 7KC, 7KCAB, 8KCAB, and 8GCBC
2005-26-53		Pacific Aerospace Corporation Ltd.	750XL
2006-01-05	S 87-12-05	Honeywell International Inc.	Engine: T5309, T5311, T5313B, T5317A, T5317A-1, and T5317B series turboshaft, T53-L-9, T53-L-11, T53-L-13B, T53-L-13BA, T53-L-13B S/SA, T53-L-13B S/SB, T53-L-13B/D, and T53-L-703 series turboshaft
2006-01-11		Cessna	208 and 208B
2006-02-51	E	Raytheon	390
Biweekly 2006-03			
2006-02-08		Turbomeca	Engine: Arriel 1B, 1D, 1D1, and 1S1
2006-02-12		DG Flugzeugbau GmbH and Glaser-Dirks Flugzeugbau GmbH	Sailplane: DG-100, DG-400, DG-500 Elan Series, and DG-500M
2006-02-51	FR	Raytheon	390
Biweekly 2006-04			
2006-02-12	COR	Glaser-Dirks Flugzeugbau GmbH	Sailplane: DG-100, DC-400, DG-500 Elan, and DG-500M
2006-03-08		Aero Advantage	Appliance: Vacuum Pumps
2006-03-17		Polskie Zakłady Lotnicze	PZL M26 01
Biweekly 2006-05			
2006-04-15		Turbomeca	Engine: Turbomeca Artouste III B, Artouste III B1, and Artouste III D turboshaft
Biweekly 2006-06			
2006-01-11 R1	R 2006-01-11	Cessna	208 and 208B
2006-05-05		MT-Propeller Entwicklung GmbH	Propeller: MT, MTV-1, MTV-2, MTV-3, MTV-5, MTV-6, MTV-7, MTV-9, MTV-10, MTV-11, MTV-12, MTV-14, MTV-15, MTV-17, MTV-18, MTV-20, MTV-21, MTV-22, MTV-24, and MTV-25
2006-06-01		Eurocopter France	Rotorcraft: EC 155B and B1
2006-06-02		Eurocopter France	Rotorcraft: SA-365N, SA365N1, AS-365N2, and SA-366G1
2006-06-06	S 2005-07-01	Cessna	208 and 208B
2006-06-51	E	General Electric	Engine: CT7-8A

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AD No.	Information	Manufacturer	Applicability
Info: E - Emergency; COR - Correction; S - Supersedes; R - Revision; - See AD for additional information;			
Biweekly 2006-07			
2005-13-09	COR	GROB-WERKE	G120A
2006-06-16		Lycoming Engines	Engine: AEIO-360-A1B6, AEIO-360-A1E6, IO-360-A1B6, IO-360-A1B6D, IO-360-A3B6, IO-360-A3B6D, IO-360-C1C6, IO-360-B1G6, IO-360-C1G6, IO-360-C1E6, LO-360-A1G6D, LO-360-A1H6, O-360-A1F6, O-360-A1F6D, O-360-A1G6D, O-360-A1H6, O-360-E1A6D, O-360-F1A6, IO-360-C1D6, LIO-360-C1E6, LO-360-E1A6d, LIO-360-C1D6
2006-06-17		Turbomeca	Engine: Arriel 1B, 1D, and 1D1 certain turboshaft
2006-07-06		Cirrus Design Corporation	SR20, SR22
Biweekly 2006-08			
2006-06-06	COR	Cessna	208 and 208B
	S 2005-07-01		
2006-07-15	S 2003-07-01	Thrush Aircraft Inc.	S-2R, S2R-G1, S2R-R1820, S2R-T15, S2R-T34, S2R-G10, S2R-G5, S2R-G6, S2RHG-T65, S2R-R1820, S2R-T34, S2R-T45, S2R-T65, 600 S2D, S-2R, S2R-R1340, S2R-R3S, S2R-T11, S2R-G1, S2R-G10, S2R-T34, S2R-G1, S2R-G10, S2R-G6, S2RHG-T34, S2R-T15, S2R-T34, S2R-T45, S-2R
2006-07-20		Turbomeca	Engine: Makila 1 A2 turboshaft
2006-08-01	S 97-24-09	BURKHART GROB LUFT-UND RAUMFAHRT GMBH & CO. KG	Sailplane: G 103 C Twin III SL
2006-08-06		Eurocopter France	Rotorcraft: SA-360C, SA-365C, SA-365C1, and SA-365C2
Biweekly 2006-09			
2002-11-05-R1	R 2002-11-05	Air Tractor	AT-501
2006-06-51	FR	General Electric	Engine: CT7-8A
2006-07-15	COR	Thrush Aircraft Inc.	S-2R, S2R-G1, S2R-R1820, S2R-T15, S2R-T34, S2R-G10, S2R-G5, S2R-G6, S2RHG-T65, S2R-R1820, S2R-T34, S2R-T45, S2R-T65, 600 S2D, S-2R, S2R-R1340, S2R-R3S, S2R-T11, S2R-G1, S2R-G10, S2R-T34, S2R-G1, S2R-G10, S2R-G6, S2RHG-T34, S2R-T15, S2R-T34, S2R-T45, S-2R
	S 2003-07-01		
2006-08-07		Brantly Helicopter	Rotorcraft: B-2, B-2A, and B-2B
2006-08-08		Air Tractor	AT-400, AT-401, AT-401B, AT-402, AT-402A, and AT-402B
2006-08-09		Air Tractor	AT-802A
2006-08-11		Pilatus	PC-12 and PC-12/45
2006-08-12	S 2001-24-51	MD Helicopters	Rotorcraft: 600N
2006-08-13		Pratt & Whitney Canada	Engine: PW535A
Biweekly 2006-10			
2002-11-05-R1	COR	Air Tractor	AT-501
	R 2002-11-05		
2006-08-08	COR	Air Tractor	AT-400, AT-401, AT-401B, AT-402, AT-402A, and AT-402B
2006-08-09	COR	Air Tractor	AT-802 and AT-802A
2006-09-10		Eurocopter France	Rotorcraft: SA-365 N1, AS-365 N2, N3, SA 366 G1, and EC-155B and B1

BW 2006-10

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CORRECTION: [*Federal Register: May 10, 2006 (Volume 71, Number 90); Page 27321; www.access.gpo.gov/su_docs/aces/aces140.html*]

2002-11-05-R1 Air Tractor, Inc.: Amendment 39-14564; Docket No. FAA-2006-23647; Directorate Identifier 2006-CE-06-AD.

When Does This AD Become Effective?

(a) This AD becomes effective on April 21, 2006.

Are Any Other ADs Affected by This Action?

(b) This AD revises AD 2002-11-05, Amendment 39-12766.

What Airplanes Are Affected by This AD?

(c) This AD applies to Model AT-501 airplanes that are certificated in any category. Use Table 1 in paragraph (c)(1) of this AD for AT-501 airplanes that do not incorporate and never have incorporated Marburger winglets and use Table 2 in paragraph (c)(3) of this AD for AT-501 airplanes that incorporate or have incorporated Marburger winglets.

(1) The following table applies to airplanes that do not incorporate and never have incorporated Marburger winglets along with the safe life (presented in hours time-in-service (TIS)) of the wing lower spar cap for all affected airplane models and serial numbers:

**TABLE 1.—SAFE LIFE FOR AIRPLANES THAT DO NOT INCORPORATE
AND NEVER HAVE INCORPORATED MARBURGER WINGLETS**

Model	Serial Nos.	Wing lower spar cap safe line
AT-501	0002 through 0061	4,531 hours TIS.
AT-501	All beginning with 0062	7,693 hours TIS.

(2) If piston-powered aircraft have been converted to turbine power, you must use the limits for the corresponding serial number turbine-powered aircraft.

(3) The following table applies to airplanes that incorporate or have incorporated Marburger winglets. These winglets are installed in accordance with Supplemental Type Certificate (STC) No. SA00490LA. Use the winglet usage factor in Table 2 of this paragraph, the safe life specified in Table 1 in paragraph (c)(1) of this AD, and the instructions included in Appendix 1 to this AD to determine the new safe life of airplanes that incorporate or have incorporated Marburger winglets:

**TABLE 2.—WINGLET USAGE FACTOR TO DETERMINE THE SAFE LIFE
FOR AIRPLANES THAT INCORPORATE OR HAVE INCORPORATED
MARBURGER WINGLETS PER STC NO. SA00490LA**

Model	Serial Nos.	Winglet usage factor
AT-501	0002 through 0061	1.6
AT-501	all serial numbers beginning with 0062	1.6

What Is the Unsafe Condition Presented in This AD?

(d) This AD is the result of service reports and analysis done on wing lower spar caps of Air Tractor airplanes. The actions specified in this AD are intended to prevent fatigue cracks from occurring in the wing lower spar cap before the established safe life is reached. Fatigue cracks in the wing lower spar cap, if not detected and corrected, could result in failure of the spar cap and lead to wing separation and loss of control of the airplane.

What Must I Do To Address This Problem?

(e) To address this problem, you must do the following:

TABLE 3.—ACTIONS/COMPLIANCE/PROCEDURES

Actions	Compliance	Procedures
(1) Modify the applicable aircraft records as follows to show the reduced safe life for the wing lower spar cap (use the information from table in paragraph (c)(1) of this AD and utilize the information in paragraph (c)(3) of this AD and the Appendix to this AD, as applicable).	Do the logbook entry within the next 10 hours TIS after July 12, 2002 (the effective date of AD 2002-11-05), unless already done. The logbook language is referenced as AD 2002-11-05 instead of AD 2002-11-05 R1 to maintain continuity and to assure that no additional action is necessary.	The owner/operator holding at least a private pilot certificate as authorized by section 43.7 of the Federal Aviation Regulations (14 CFR 43.7) may modify the aircraft records as specified in paragraphs (e)(1) of this AD. Make an entry into the aircraft records showing compliance with this portion of the following section 43.9 of the Federal Aviation Regulations (14 CFR 43.9). Do the replacement when the safe life is reached following Snow Engineering Service Letters #197 or #205, both revised March 26, 2001, as applicable. The owner/operator may not do the replacement unless he/she holds the proper mechanic authorization.
(i) Incorporate the following into the Aircraft Logbook "In accordance with AD 2002-11-05, the wing lower spar cap is life limited to ____." Insert the applicable safe life number from the applicable tables in paragraphs (c)(1) and (c)(3) of this AD and the Appendix of this AD.		
(ii) If, as of the time of the logbook entry requirement of paragraph (e)(1) of this AD, your airplane is over or within 10 hours of the safe life, an additional 10 hours TIS after July 12, 2002 (the effective date of this AD) is allowed to do the replacement.		

Actions	Compliance	Procedures
<p>(2) If you have ordered parts from the factory when it is time to replace the wing lower spar cap (as required when you reach the established safe life), but the parts are not available, you may eddy-current inspect the wing lower spar cap. These inspections are allowed until one of the following occurs, at which time the replacement must be done:</p> <ul style="list-style-type: none"> (i) Crack(s) is/are found; (ii) Parts become available from the manufacturer; or (iii) Not more than three inspections or 1,200 hours TIS go by: the first inspection would have to be done upon accumulating the safe life; the second inspection would have to be done within 400 hours TIS after accumulating the safe life; the third inspection would have to be done 400 hours TIS after the second inspection; and the replacement would have to be done within 400 hours TIS after the third inspection (maximum elapsed time would be 1,200 hours TIS). 	<p>Inspect before further flight after ordering the parts and thereafter at intervals not to exceed 400 hours TIS until one of the criteria in paragraphs (e)(2)(i), (e)(2)(ii), and (e)(2)(iii) of this AD is met.</p>	<p>Following the procedures in Snow Engineering Service Letter #197, pages 1 and 2, revised March 26, 2001, and page 3, dated June 13, 2000; and Snow Engineering Service Letter #205, pages 1, 2, and 4, revised March 26, 2001, and page 3, dated October 25, 2000 as applicable.</p>
<p>(3) Eddy-current inspect the wing lower spar cap in order to detect any crack before it extends to the modified center section of the wing and repair that crack or replace the wing section. The inspection must be done by one of the following:</p> <ul style="list-style-type: none"> (i) a Level 2 or Level 3 inspector that is certified for eddy-current inspection using the guidelines established by the American Society for Non-destructive Testing or MIL-STD-410; or (ii) A person authorized to perform AD work who has completed and passed the Air Tractor, Inc. training course on Eddy Current Inspection on wing lower spar caps. 	<p>Immediately before the replacement/modification required when you reach the new safe life. For airplanes that had this replacement done in accordance with either AD 2001-10-04 or AD 2001-10-04 R1, do this inspection and any necessary corrective action within the next 400 hours TIS after July 12, 2002 (the effective date of AD 2002-11-05), unless already done (have the mechanic who did the work mark the logbook accordingly).</p>	<p>Following the procedures in Snow Engineering Service Letter #197, pages 1 and 2, revised March 26, 2001, and page 3, dated June 13, 2000; and Snow Engineering Service Letter #205, pages 1, 2, and 4, revised March 26, 2001, and page 3, dated October 25, 2000, as applicable.</p>

May I Request an Alternative Method of Compliance (AMOC)?

(f) The Manager, Fort Worth or Los Angeles Airplane Certification Office (ACO), as applicable, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19.

(1) For information on any already approved AMOCs or for information pertaining to this AD, contact:

(i) For the airplanes that do not incorporate and never have incorporated Marburger winglets: Rob Romero, Aerospace Engineer, FAA, Fort Worth Airplane Certification Office, 2601 Meacham Boulevard, Fort Worth, Texas 76193-0150; telephone: (817) 222-5102; facsimile: (817) 222-5960; and

(ii) For airplanes that incorporate or have incorporated Marburger winglets: John Cecil, Aerospace Engineer, Los Angeles Aircraft Certification Office, FAA, 3960 Paramount Boulevard, Lakewood, California 90712; telephone: (562) 627-5228; facsimile: (562) 627-5210.

(2) AMOCs approved for AD 2001-10-04 and/or AD 2000-14-51 are not considered approved for this AD.

(3) AMOCs approved for AD 2001-10-04 R1 for the Model AT-501 airplanes are considered approved for this AD.

(4) AMOCs approved for AD 2002-11-05 for the Model AT-501 airplanes are considered approved for this AD.

Are There Any Additional AMOCs Being Considered for This AD?

(g) The FAA may approve, as an AMOC, inspection of the wing lower spar cap. You must submit the request in accordance with the procedures in paragraph (f) of this AD and adhere to the following:

(1) If you are over or within 10 hours TIS of reaching the safe life used in paragraph (e)(1) of this AD for the wing lower spar cap and you have ordered parts and scheduled a date for the replacement, but having the replacement done on this date grounds the airplane, do the following:

(i) Inspect the wing lower spar cap within 10 hours TIS after approval of the AMOC;

(ii) re-inspect thereafter at intervals not to exceed 400 hours TIS until either cracks are found, the date of the scheduled replacement occurs, or 1,200 hours TIS after the initial inspection are accumulated, whichever occurs first; and

(iii) do the inspections following the procedures in Snow Engineering Service Letter 197, pages 1 and 2, revised March 26, 2001, and page 3, dated June 13, 2000; and Snow Engineering Service Letter 205, pages 1, 2, and 4, revised March 26, 2001, and page 3, dated October 25, 2000, as applicable.

(2) Submit the following to the Fort Worth or Los Angeles ACO, as applicable, using the procedures described in paragraph (f) of this AD:

(i) The airplane model serial number designation, and airplane registration number (N-number);

(ii) the number of hours TIS on the airplane;

(iii) the scheduled date for the replacement; and

(iv) the name and location of the authorized repair shop.

(3) For more information about this issue, contact:

(i) For the airplanes that do not incorporate and never have incorporated Marburger winglets: Rob Romero, Aerospace Engineer, FAA, Fort Worth Airplane Certification Office, 2601 Meacham Boulevard, Fort Worth, Texas 76193-0150; telephone: (817) 222-5102; facsimile: (817) 222-5960; and

(ii) For the airplanes that incorporate or have incorporated winglets: John Cecil, Aerospace Engineer, Los Angeles Aircraft Certification Office, FAA, 3960 Paramount Boulevard, Lakewood, California 90712; telephone: (562) 627-5228; facsimile: (562) 627-5210.

Special Flight Permit

(h) Under 14 CFR part 39.23, we are allowing special flight permits for the purpose of compliance with this AD under the following conditions:

- (1) Only operate in day visual flight rules (VFR).
- (2) Ensure that the hopper is empty.
- (3) Limit airspeed to 135 miles per hour (mph) indicated airspeed (IAS).
- (4) Avoid any unnecessary g-forces.
- (5) Avoid areas of turbulence.
- (6) Plan the flight to follow the most direct route.

Does This AD Incorporate Any Material by Reference?

(i) You must do the actions required by this AD following the instructions in Snow Engineering Service Letter 197, pages 1 and 2, revised March 26, 2001, and page 3, dated June 13, 2000; and Snow Engineering Service Letter 205, pages 1, 2, and 4, revised March 26, 2001, and page 3, dated October 25, 2000. On June 8, 2001 (66 FR 27014, May 16, 2001), the Director of the Federal Register previously approved this incorporation by reference under 5 U.S.C. 552(a) and 1 CFR part 51. To get a copy of this service information, contact Air Tractor, Incorporated, P.O. Box 485, Olney, Texas 76374; or Marburger Enterprises, Inc., 1227 Hillcourt, Williston, North Dakota 58801; telephone: (800) 893-1420 or (701) 774-0230; facsimile: (701) 572-2602. To review copies of this service information, go to the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html or call (202) 741-6030. To view the AD docket, go to the Docket Management Facility; U.S. Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL-401, Washington, DC 20590-001 or on the Internet at <http://dms.dot.gov>. The docket number is FAA-2006-23647; Directorate Identifier 2006-CE-06-AD.

Appendix to AD 2002-11-05 R1

The following provides procedures for determining the safe life for those Model AT-501 airplanes that incorporate or have incorporated Marburger winglets. These winglets are installed in accordance with Supplemental Type Certificate (STC) No. SA00490LA.

1. Review your airplane's logbook to determine your airplane's time in service (TIS) with winglets installed per Marburger STC No. SA00490LA. This includes all time spent with the winglets currently installed and any previous installations where the winglet was installed and later removed.

Example: A review of your airplane's logbook shows that you have accumulated 350 hours TIS since incorporating the Marburger STC. Further review of the airplane's logbook shows that a previous owner had installed the STC and later removed the winglets after accumulating 150 hours TIS. Therefore, your airplane's TIS with the winglets installed is 500 hours.

If you determine that the winglet STC has never been incorporated on your airplane, then your safe life is presented in paragraph (c)(1) of this AD. Any further winglet installation would be subject to a reduced safe life per these instructions.

2. Determine your airplane's unmodified safe life from paragraph (c)(1) of this AD.

Example: Your airplane is a Model AT-501, serial number 0100. From paragraph (c)(1) of this AD, the unmodified safe-life of your airplane is 7,693 hours TIS. All examples from hereon will be based on the Model AT-501, serial number 0100 airplane.

3. Determine the winglet usage factor from paragraph (c)(3) of this AD.

Example: Again, your airplane is a Model AT-501, serial number 0100. From paragraph (c)(3) of this AD, your winglet usage factor is 1.6.

4. Adjust the winglet TIS to account for the winglet usage factor. Multiply the winglet TIS (result of 1.) by the winglet usage factor (result of 3.).

Example: Winglet TIS is 500 hours X a winglet usage factor of 1.6. The adjusted winglet TIS is 800 hours.

Appendix to AD 2002-11-05 R1

5. Calculate the winglet usage penalty. Subtract the winglet TIS (result of 1.) from the adjusted winglet TIS (result of 4.).

Example: Adjusted winglet TIS is 800 hours - the winglet TIS of 500 hours. The winglet usage penalty is 300 hours TIS.

6. Adjust the safe life of your airplane to account for winglet usage. Subtract the winglet usage penalty (result of 5.) result from the unmodified safe life from paragraph (c)(1) of this AD (the result of 2.).

Example: The unmodified safe life is 7,693 hours TIS - the 300 hours TIS usage penalty = 7,393 hours TIS adjusted safe life.

7. If you remove the winglets from your airplane before further flight or no longer have the winglets installed on your airplane, the safe life of your airplane is the adjusted safe life (result of 6.). Enter this number in paragraph (e)(1) of this AD and the airplane logbook.

8. If you keep the current winglet installation on your airplane, you must further reduce the safe life by dividing the adjusted safe life (result of 6.) by the winglet usage factor (result of 3.). Record this result in your airplane's logbook.

Example: Adjusted safe life is 7,393 hours / winglet usage factor of 1.6 = 4,621 hours TIS.

9. If, at anytime in the future, you install or remove the Marburger winglet STC from your airplane, you must repeat the procedures in this Appendix.

Issued in Kansas City, Missouri, on April 10, 2006.

David R. Showers,

Acting Manager, Small Airplane Directorate, Aircraft Certification Service.

[FR Doc. 06-3614 Filed 4-14-06; 8:45 am]

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CORRECTION: [*Federal Register: May 12, 2006 (Volume 71, Number 92); Page 27794; www.access.gpo.gov/su_docs/aces/aces140.html*] We are also correcting text in paragraph (e)(2) (page 10), "Note 1" (page 10), and paragraph (i) (page 12).

2006-08-08 Air Tractor, Inc.: Amendment 39-14563; Docket No. FAA-2006-23646; Directorate Identifier 2006-CE-05-AD.

When Does This AD Become Effective?

(a) This AD becomes effective on April 21, 2006.

What Other ADs Are Affected by This Action?

(b) As of the issuance of this action, AD 2002-11-05 applies to Models AT-400, AT-401, AT-401B, AT-402, AT-402A, AT-402B, AT-501, AT-802, and AT-802A airplanes. The FAA is revising AD 2002-11-05 to remove the AT-400 series and AT-800 series airplanes from the applicability. The FAA is also issuing another similar AD on the AT-800 airplanes.

What Airplanes Are Affected by This AD?

(c) This AD applies to certain Models AT-400, AT-401, AT-401B, AT-402, AT-402A, and AT-402B airplanes that are certificated in any category. Use paragraph (c)(1) of this AD for affected airplanes that do not incorporate and never have incorporated Marburger winglets. Use paragraph (c)(3) of this AD for airplanes that have been modified to install lower spar caps, part number (P/N) 21058-1 and P/N 21058-2. Use paragraph (c)(4) of this AD for certain Models AT-401, AT-401B, AT-402, AT-402A, and AT-402B airplanes that incorporate or have incorporated Marburger winglets.

(1) The following table applies to airplanes that do not incorporate and never have incorporated Marburger winglets along with the safe life (presented in hours time-in-service (TIS)) of the wing lower spar cap for all affected airplane models and serial numbers:

TABLE 1.—SAFE LIFE FOR AIRPLANES THAT DO NOT INCORPORATE AND NEVER HAVE INCORPORATED MARBURGER WINGLETS

Model	Serial Nos.	Wing lower spar cap safe life
AT-400	All beginning with 0416	13,300 hours TIS.
AT-401	0662 through 0951	10,757 hours TIS.
AT-401B	0952 through 1020, except 1015	6,948 hours TIS.
AT-401B	1015 and all beginning with 1021	7,777 hours TIS.

Model	Serial Nos.	Wing lower spar cap safe life
AT-402	0694 through 0951	7,440 hours TIS.
AT-402A	0738 through 0951	7,440 hours TIS.
AT-402A	0952 through 1020	2,000 hours TIS.
AT-402A	All beginning with 1021	2,300 hours TIS.
AT-402B	0966 through 1020, except 1015	2,000 hours TIS.
AT-402B	1015 and all beginning with 1021	2,300 hours TIS.

(2) If piston-powered aircraft have been converted to turbine power, you must use the limits for the corresponding serial number turbine-powered aircraft.

(3) If you have an aircraft that has been modified by installing lower spar caps, P/N 21058-1 and P/N 21058-2, you must use a wing lower spar cap life of 9,800 hours TIS. No inspections are required to reach this life.

(i) Airplanes that have been modified with replacement spar caps, P/N 21058-1 and P/N 21058-2, are not eligible to have Supplemental Type Certificate (STC) No. SA00490LA, Marburger winglets, installed.

(ii) If your airplanes currently has spar caps, P/N 21058-1 and P/N 21058-2, and winglets installed, then you must remove the winglets before further flight and you must contact the FAA at the address in paragraph (l)(1) of this AD for a new safe life.

(iii) Installation of Marburger winglets on airplanes that have been modified with replacement spar caps, P/N 21058-1 and P/N 21058-2, will require additional fatigue-data substantiating an appropriate safe life. If you have replacement spar caps and wish to install winglets, you must contact the FAA at the address in paragraph (l)(1) of this AD for additional information.

(4) The following table applies to airplanes that incorporate or have incorporated Marburger winglets. These winglets are installed following STC No. SA00490LA. Use the winglet usage factor in Table 2 of this paragraph, the wing lower spar cap safe life specified in Table 1 in paragraph (c)(1) of this AD, and the instructions included in Appendix 1 to this AD to determine the new safe life of airplanes that incorporate or have incorporated Marburger winglets:

TABLE 2.—WINGLET USAGE FACTOR TO DETERMINE THE SAFE LIFE FOR AIRPLANES THAT INCORPORATE OR HAVE INCORPORATED MARBURGER WINGLETS PER STC NO. SA00490LA

Model	Serial Nos.	Winglet usage factor
AT-401	0662 through 0951	1.6
AT-401B	0952 through 1020, except 1015	1.1
AT-401B	1015 and all beginning with 1021	1.1
AT-402	0694 through 0951	1.6
AT-402A	0738 through 0951	1.6
AT-402A	0952 through 1020	1.1
AT-402A	All beginning with 1021	1.1
AT-402B	0966 through 1020, except 1015	1.1
AT-402B	1015 and all beginning with 1021	1.1

What Is the Unsafe Condition Presented in This AD?

(d) This AD is the result of fatigue cracking of the wing main spar lower cap at the center splice joint outboard fastener hole. The actions specified in this AD are intended to detect and correct cracks in the wing main spar lower cap, which could result in failure of the spar cap and lead to wing separation and loss of control of the airplane.

What Must I Do To Address This Problem?

(e) Safe Life Record: For all affected airplanes, modify the applicable aircraft records (logbook) as follows to show the safe life for the wing lower spar cap listed in this AD (use the information from paragraph (c) of this AD and Appendix 1 to this AD, as applicable).

(1) Incorporate the following into the Aircraft Logbook: "Following AD 2006-08-08 the wing lower spar cap is life limited to — hours time-in-service (TIS)." Insert the applicable safe life number from the applicable tables in paragraph (c) of this AD and Appendix 1 to this AD.

(i) Do the logbook entry within the next 10 hours TIS after April 21, 2006 (the effective date of this AD).

(ii) The owner/operator holding at least a private pilot certificate as authorized by section 43.7 of the Federal Aviation Regulations (14 CFR 43.7) may modify the aircraft records. Make an entry into the aircraft records showing compliance with this portion of the AD following section 43.9 of the Federal Aviation Regulations (14 CFR 43.9).

(2) Wing Spar Replacement: For all affected airplanes, replace the wing lower spar cap following Snow Engineering Drawing Number 21088, dated November 3, 2004. Replace upon accumulating the safe life used in paragraph (e)(1) of this AD or within the next 50 hours TIS after April 21, 2006 (the effective date of this AD), whichever occurs later. The owner/operator may not do the spar cap replacement, unless he/she holds the proper mechanic's authorization.

(f) Inspection Requirements: For all affected airplanes, except Model AT-402A, all serial numbers beginning with 0952, and except Model AT-402B, all serial numbers beginning with 0966: Do the initial inspection of the outboard two lower spar cap bolt holes following Snow Engineering Co. Process Specification 197, page 1, revised June 4, 2002, pages 2 through 4, dated February 23, 2001, and page 5, dated May 3, 2002; and using the wing spar lower cap TIS schedules listed in the following table. After the initial inspection, perform repetitive inspections using the same procedure as the initial inspection at the repetitive inspection intervals listed in the following table. If not already done, install access panels at the time of the first inspection following Snow Engineering Service Letter 202, page 3, dated October 16, 2000.

Note 1: Hours listed in the table are in hours TIS and the phrase "within — hours" refers to "within — hours after April 21, 2006 (the effective date of this AD)."

TABLE 3.—INSPECTION TIMES

Model	Serial Nos.	Current wing spar lower cap TIS hours	Initial inspection	Repetitive inspection interval
AT-400	All beginning with 0416	Greater than 7,750	Within 50 hours or upon the accumulation of 8,000 hours, whichever is later	900 hours.
AT-401	0662-0951	Greater than 6,250	Within 50 hours or upon the accumulation of 6,500 hours, whichever is later	700 hours.
AT-401	0662-0951	Greater than 4,350 but less than or equal to 6,250.	Within 250 hours or upon the accumulation of 4,850 hours, whichever is later	700 hours.
AT-401	0662-0951	Greater than 2,750 but less than or equal to 4,350.	Within 500 hours	700 hours.

Model	Serial Nos.	Current wing spar lower cap TIS hours	Initial inspection	Repetitive inspection interval
AT-401	0662-0951	Less than or equal to 2,750.	Upon the accumulation of 3,250	700 hours.
AT-401B	0952-1020 except 1015	Greater than 3,950	Within 50 hours or upon the accumulation of 4,200 hours, whichever is later	600 hours.
AT-401B	0952-1020 except 1015	Greater than 2,650 but less than or equal to 3,950.	Within 250 hours or upon the accumulation of 3,150 hours, whichever is later	600 hours.
AT-401B	0952-1020 except 1015	Greater than 1,600 but less than or equal to 2,650.	Within 500 hours	600 hours.
AT-401B	0952-1020 except 1015	Less than or equal to 1,600.	Upon the accumulation of 2,100 hours	600 hours.
AT-401B	1015 and 1021-1124	Greater than 4,450	Within 50 hours or upon the accumulation of 4,700, whichever is later	400 hours.
AT-401B	1015 and 1021-1124	Greater than 3,000 but less than or equal to 4,450	Within 250 hours or upon the accumulation of 3,500 hours, whichever is later	400 hours.
AT-401B	1015 and 1021-1124	Greater than 1,850 but less than or equal to 3,000	Within 500 hours	400 hours.
AT-401B	1015 and 1021-1124	Less than or equal to 1,850	Upon the accumulation of 2,350	400 hours.
AT-401B	All beginning with 1125	Greater than 4,450	Within 50 hours or upon the accumulation of 4,700 hours, whichever is later	1,000 hours.
AT-401B	All beginning with 1125	Greater than 3,000 but less than or equal to 4,450	Within 250 hours or upon the accumulation of 3,500 hours, whichever is later	1,000 hours.
AT-401B	All beginning with 1125	Greater than 1,850 but less than or equal to 3,000	Within 500 hours	1,000 hours.
AT-401B	All beginning with 1125	Less than or equal to 1,850	Upon the accumulation of 2,350	1,000 hours.
AT-402/402A	0694-0951	Greater than 4,250	Within 50 hours or upon the accumulation of 4,500, whichever is later	700 hours.
AT-402/402A	0694-0951	Greater than 2,850 but less than or equal to 4,250	Within 250 hours or upon the accumulation of 3,350, whichever is later	700 hours.
AT-402/402A	0694-0951	Greater than 1,750 but less than or equal to 2,850	Within 500 hours	700 hours.
AT-402/402A	0694-0951	Less than or equal to 1,750	Upon the accumulation of 2,250	700 hours.

(g) For all affected airplanes: Replace any cracked wing lower spar cap following Snow Engineering Drawing Number 21088, dated November 3, 2004, before further flight after the inspection in which cracks are found.

(h) For all affected airplanes, except Model AT-402A, all serial numbers beginning with 0952, and except Model AT-402B, all serial numbers beginning with 0966: Report to the FAA any cracks detected as the result of each inspection required by paragraph (f) of this AD on the form in Figure 1 of this AD.

(1) Only if cracks are found, send the report within 10 days after the inspection required in paragraph (f) of this AD.

(2) The Office of Management and Budget (OMB) approved the information collection requirements contained in this regulation under the provisions of the Paperwork Reduction Act and assigned OMB Control Number 2120-0056.

(i) For all affected airplanes: Upon the accumulation of the life used in paragraph (e)(1) of this AD or within the next 50 hours TIS after April 21, 2006 (the effective date of this AD), whichever occurs later, you must replace your wing lower spar cap before further flight following Snow Engineering Drawing Number 21088, dated November 3, 2004.

(j) For Model AT-402A airplanes, all serial numbers beginning with 0952; and Model AT-402B airplanes, all serial numbers beginning with 0966: In lieu of the safe life used in paragraph (e)(1) of this AD, you may eddy-current inspect and modify the wing lower spar cap. The inspection schedule and modification procedures are included in Appendix 2 to this AD.

(k) For all affected airplanes (those complying with the actions in the AD or AMOC): One of the following must do the inspection:

(1) A level 2 or 3 inspector certified in eddy current inspection using the guidelines established by the American Society for Nondestructive Testing or MIL-STD-410; or

(2) A person authorized to perform AD work and who has completed and passed the Air Tractor, Inc. training course on Eddy Current Inspection on wing lower spar caps.

AD 2006-08-08 INSPECTION REPORT (REPORT <u>ONLY</u> IF CRACKS ARE FOUND)	
1. Inspection Performed By:	2. Phone:
3. Aircraft Model:	4. Aircraft Serial Number:
5. Engine Model Number:	6. Aircraft Total TIS:
7. Wing Total TIS:	8. Lower Spar Cap TIS:
9. Has the lower spar cap been inspected before? (Eddy-current, Dye penetrant, magnetic particle, ultrasound) <input type="checkbox"/> Yes <input type="checkbox"/> No	9a. If yes, Date: _____ Inspection Method: _____ Lower Spar Cap TIS: _____ Cracks found? <input type="checkbox"/> Yes <input type="checkbox"/> No
10. Has there been any major repair or alteration performed to the spar cap? <input type="checkbox"/> Yes <input type="checkbox"/> No	10a. If yes, specify (Description and TIS)
11. Date of AD inspection: _____	
12. Inspection Results: (Note: Report only if cracks are found)	12a. <input type="checkbox"/> Left Hand <input type="checkbox"/> Right Hand
12b. Crack Length: _____	12c. Does drilling hole to next larger size remove all traces of the crack(s)? <input type="checkbox"/> Yes <input type="checkbox"/> No
12d. Corrective Action Taken:	

Mail report to: Manager, Fort Worth ACO, ASW-150, 2601 Meacham Blvd., Fort Worth, TX 76193-0150; or fax to (817) 222-5960

Figure 1

May I Request an Alternative Method of Compliance?

(1) The Manager, Fort Worth or Los Angeles Airplane Certification Office (ACO), as applicable, FAA, has the authority to approve alternative methods of compliance (AMOCs) for this AD, if requested using the procedures found in 14 CFR 39.19. For information on any already approved alternative methods of compliance, contact:

(1) For the airplanes that do not incorporate and never have incorporated Marburger winglets: Rob Romero, Aerospace Engineer, FAA, Fort Worth Airplane Certification Office, 2601 Meacham Boulevard, Fort Worth, Texas 76193-0150; telephone: (817) 222-5102; facsimile: (817) 222-5960.

(2) For airplanes that incorporate or have incorporated Marburger winglets: John Cecil, Aerospace Engineer, Los Angeles Aircraft Certification Office, FAA, 3960 Paramount Boulevard, Lakewood, California 90712; telephone: (502) 627-5228; facsimile: (562) 627-5210.

(m) AMOCs approved for AD 2001-10-04, AD 2001-10-04 R1, or AD 2002-11-05 for the AT-400 series airplanes are not considered approved for this AD.

Special Flight Permit

(n) Under 14 CFR part 39.23, we are allowing special flight permits for the purpose of compliance with this AD under the following conditions:

- (1) Only operate in day visual flight rules (VFR).
- (2) Ensure that the hopper is empty.
- (3) Limit airspeed to 135 miles per hour (mph) indicated airspeed (IAS).
- (4) Avoid any unnecessary g-forces.
- (5) Avoid areas of turbulence.
- (6) Plan the flight to follow the most direct route.

Does This AD Incorporate Any Material by Reference?

(o) You must do the actions required by this AD following the instructions in Snow Engineering Drawing 21088, dated November 3, 2004; Snow Engineering Co. Process Specification 197, page 1, revised June 4, 2002, pages 2 through 4, dated February 23, 2001, and page 5, dated May 3, 2002; and Snow Engineering Co. Service Letter 202, page 3, dated October 16, 2000. The Director of the Federal Register approved the incorporation by reference of this service information following 5 U.S.C. 552(a) and 1 CFR part 51. To get a copy of this service information, contact Air Tractor, Incorporated, P.O. Box 485, Olney, Texas 76374; telephone: (940) 564-5616; facsimile: (940) 564-5612; or Marburger Enterprises, Inc., 1227 Hillcourt, Williston, North Dakota 58801; telephone: (800) 893-1420 or (701) 774-0230; facsimile: (701) 572-2602. To review copies of this service information, go to the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, go to:

http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html or call (202) 741-6030. To view the AD docket, go to the Docket Management Facility; US Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL-401, Washington, DC 20590-001 or on the Internet at <http://dms.dot.gov>. The docket number is FAA-2006-23646; Directorate Identifier 2006-CE-05-AD.

Appendix 1 To AD 2006-08-08

The following provides procedures for determining the safe life for those Models AT-401, AT-401B, AT-402, AT-402A, and AT-402B airplanes that incorporate or have incorporated Marburger winglets. These winglets are installed following Supplemental Type Certificate (STC) No. SA00490LA.

What if I removed the Marburger winglets prior to further flight after the effective date of this AD or prior to the effective date of this AD?

1. Review your airplane's logbook to determine your airplane's time in service (TIS) with winglets installed per Marburger STC No. SA00490LA. This includes all time spent with the winglets currently installed and any previous installations where the winglet was installed and later removed.

Example: A review of your airplane's logbook shows that you have accumulated 350 hours TIS since incorporating the Marburger STC. Further review of the airplane's logbook shows that a previous owner had installed the STC and later removed the winglets after accumulating 150 hours TIS. Therefore, your airplane's TIS with the winglets installed is 500 hours.

If you determine that the winglet STC has never been incorporated on your airplane, then your safe life is presented in paragraph (c)(1) of this AD. Any future winglet installation will be subject to a reduced safe life per these instructions.

2. Determine your airplane's unmodified safe life from paragraph (c)(1) of this AD.

Example: Your airplane is a Model AT-401B, serial number 1022. From paragraph (c)(1) of this AD, the unmodified safe life of your airplane is 7,777 hours TIS.

All examples from hereon will be based on the Model AT-401B, serial number 1022 airplane.

3. Determine the winglet usage factor from paragraph (c)(4) of this AD.

Example: Again, your airplane is a Model AT-401B, serial number 1022. From paragraph (c)(4) of this AD, your winglet usage factor is 1.1.

4. Adjust the winglet TIS to account for the winglet usage factor. Multiply the winglet TIS (result of Step 1 above) by the winglet usage factor (result of Step 3 above).

Example: Winglet TIS is 500 hours X a winglet usage factor of 1.1. The adjusted winglet TIS is 550 hours.

5. Calculate the winglet usage penalty. Subtract the winglet TIS (result of Step 1 above) from the adjusted winglet TIS (result of Step 4 above).

Example:

Adjusted winglet TIS-the winglet TIS = winglet usage penalty.
(550 hours)-(500 hours TIS) = (50 hours TIS).

6. Adjust the safe life of your airplane to account for winglet usage. Subtract the winglet usage penalty (result of Step 5 above) result from the unmodified safe life from paragraph (c)(1) of this AD (result of Step 2 above.).

Example:

Unmodified safe life-winglet usage penalty = adjusted safe life.
(7,777 hours TIS)-(50 hours TIS) = (7,727 hours TIS).

7. If you remove the winglets from your airplane before further flight or no longer have the winglets installed on your airplane, the safe life of your airplane is the adjusted safe life (result of Step 6 above). Enter this number in paragraph (e)(1) of this AD and the airplane logbook.

What if I have the Marburger winglet installed as of the effective date of this AD and plan to operate my airplane without removing the winglet?

1. Review your airplane's logbook to determine your airplane's TIS without the winglets installed.

Example: A review of your airplane's logbook shows that you have accumulated 1,500 hours TIS, including 500 hours with the Marburger winglets installed. Therefore, your airplane's TIS without the winglets installed is 1,000 hours.

2. Determine your airplane's unmodified safe life from paragraph (c)(1) of this AD.

Example: Your airplane is a Model AT-401B, serial number 1022. From paragraph (c)(1) of this AD, the unmodified safe life of your airplane is 7,777 hours TIS.

All examples from hereon will be based on the Model AT-401B, serial number 1022 airplane.

3. Determine the winglet usage factor from paragraph (c)(4) of this AD.

Example: Again, your airplane is a Model AT-401B, serial number 1022. From paragraph (c)(4) of this AD, your winglet usage factor is 1.1.

4. Determine the potential winglet TIS. Subtract the TIS without the winglets installed (result of Step 1 above) from the unmodified safe life (result of Step 2 above).

Example:

Unmodified safe life-TIS without winglets = Potential winglet TIS.
 (7,777 hours TIS)-(1,000 hours TIS) = (6,777 hours TIS).

5. Adjust the potential winglet TIS to account for the winglet usage factor. Divide the potential winglet TIS (result of Step 4 above) by the winglet usage factor (result of Step 3 above).

Example:

Potential winglet TIS / Winglet usage factor = Adjusted potential winglet TIS.
 (6,777 hours TIS) / (1.1) = (6,155 hours TIS).

6. Calculate the winglet usage penalty. Subtract the adjusted potential winglet TIS (result of Step 5 above) from the potential winglet TIS (result of Step 4 above).

Example:

Potential winglet TIS-Adjusted potential winglet TIS = Winglet usage penalty.
 (6,777 hours TIS)-(6,155 hours TIS) = (622 hours TIS).

7. Adjust the safe life of your airplane to account for the winglet installation. Subtract the winglet usage penalty (result of Step 6 above) from the unmodified safe life from paragraph (c)(1) of this AD (the result of Step 2 above).

Example:

Unmodified safe life-Winglet usage penalty = Adjusted safe life.
 (7,777 hours TIS)-(622 hours TIS) = (7,155 hours TIS).

8. Enter the adjusted safe life (result of Step 7 above) in paragraph (e)(1) of this AD and the airplane logbook.

What if I install or remove the Marburger winglet from my airplane in the future?

If, at anytime in the future, you install or remove the Marburger winglet STC from your airplane, you must repeat the procedures in this Appendix to determine the airplane's safe life.

Appendix 2—Alternative Method of Compliance (AMOC) To AD 2006-08-08

Optional Inspection Program

For Model AT-402A airplanes, all serial numbers (S/Ns) beginning with 0952, and Model AT-402B airplanes, all S/Ns beginning with 0966, that do not incorporate and never have incorporated Marburger winglets installed following STC No. SA00490LA; you may begin a repetitive inspection interval program as an alternative to the safe life requirement of this AD with the following provisions:

1. Upon accumulating 1,600 hours time-in-service (TIS) or within the next 50 hours TIS after April 21, 2006 (the effective date of AD 2006-08-08), whichever occurs later, eddy-current inspect the outboard two lower spar cap bolt holes following Snow Engineering Process Specification 197, page 1, revised June 4, 2002; pages 2 through 4, dated February 23, 2001; and page 5, dated May 3, 2002. The inspection must be done by one of the following:

- a. A Level 2 or Level 3 inspector that is certified for eddy-current inspection using the guidelines established by the American Society for Nondestructive Testing or MIL-STD-410; or
- b. A person authorized to do AD work and who has completed and passed the Air Tractor, Inc. training course on Eddy Current Inspection on wing lower spar caps.

2. Repeat these inspections at intervals of (as applicable):

a. 400 hours TIS:

- i. Model AT-402A, S/Ns 1021 through 1124
- ii. Model AT-402B, S/Ns 1015, and 1021 through 1124

b. 600 hours TIS:

- i. Model AT-402A, S/Ns 0952 through 1020
- ii. Model AT-402B, S/Ns 0966 through 1020, except 1015

c. 1,000 hours TIS:

- i. Model AT-402A, all S/Ns beginning with 1125
- ii. Model AT-402B, all S/Ns beginning with 1125

d. If the outboard two lower spar cap bolt holes have been cold worked following Snow Engineering Service Letter 238 or 239, both dated September 30, 2004, then you may double the inspection intervals listed in a., b., and c. above (800 hours TIS, 1,200 hours TIS, or 2,000 hours TIS, as applicable) (See Step 8.-re: mid cycle cold work).

e. Your logbook entry must include the work done and the inspection intervals that are upcoming, as follows:

"Following AD 2006-08-08, at XXXX (insert hours TIS of the initial pre-modification inspection) hours TIS an eddy-current inspection has been performed. As of now, the safe life listed in the AD no longer applies to this airplane. This airplane must be eddy-current inspected at intervals not to exceed (400/600/800/1,000/1,200/2,000, as applicable) hours TIS. The first of these inspections is due at (insert the total number of hours TIS the first of these inspections is due) hours TIS."

3. If at any time a crack is found, and:

a. If the crack indication goes away by doing the initial steps of the modification following the applicable sheet of Snow Engineering Co. Drawing Number 20992, then you may continue to modify your wing. After modification, proceed to Step 5.

b. If the crack indication does not go away by doing the initial steps of the modification following the applicable sheet of Snow Engineering Co. Drawing Number 20992, then you must replace all parts and hardware listed in Step 7.

c. Report to the FAA any cracks found using the form in Figure 1 of this AD.

4. Upon accumulating 4,000 hours TIS, you must:

a. Modify your center splice connection following the applicable sheet of Snow Engineering Co. Drawing Number 20992, unless already done. Before doing the modification, do an eddy-current inspection following Snow Engineering Process Specification 197, page 1, revised June 4, 2002; pages 2 through 4, dated February 23, 2001; and page 5, dated May 3, 2002. (See Step 9). If, as of April 21, 2006 (the effective date of AD 2006-08-08), your airplane is over or within 50 hours of reaching the 4,000-hour TIS modification requirement, then you must perform the modification within 50 hours TIS.

b. Your logbook entry must include the work done and the inspection intervals that are upcoming, as follows:

"Following AD 2006-08-08, at XXXX (insert hours TIS of the modification) hours TIS an eddy-current inspection has been performed. As of now, the safe life listed in the AD no longer applies to this airplane. This airplane must be eddy-current inspected at (insert the number of hours TIS at modification plus 1,600 hours TIS) hours TIS.

5. Upon accumulating 1,600 hours TIS after modification, inspect the left-hand and right-hand outboard two lower spar cap bolt holes following Snow Engineering Process Specification 197, page 1, revised June 4, 2002; pages 2 through 4, dated February 23, 2001; and page 5, dated May 3, 2002.

6. Repeat the inspection at intervals of:

a. 1,000 hours TIS; or

b. 2,000 hours TIS if the outboard two lower spar cap bolt holes have been cold worked following Snow Engineering Service Letter 239, dated September 30, 2004 (See Step 8.).

c. Your logbook entry must include the work done and the post-modification inspection intervals that are upcoming, as follows:

"Following AD 2006-08-08, at XXXX (insert hours TIS of the initial post-modification inspection) hours TIS an eddy-current inspection has been performed. As of now, the safe life listed in the AD no longer applies to this airplane. This airplane must be eddy-current inspected at intervals not to exceed (1,000/2,000, as applicable) hours TIS. The first of these inspections is due at (insert the total number of hours TIS the first of these inspections is due) hours TIS."

d. If at any time a crack is found, then before further flight you must replace the lower spar caps, splice blocks, and wing attach angles and hardware. You must also notify the FAA using the form in Figure 1 of this AD.

7. Upon accumulating 8,000 hours TIS, before further flight you must replace the lower spar caps, splice blocks, and wing attach angles (P/N 20693-1) and associated hardware. No additional time will be authorized for airplanes that are at over 8,000 hours TIS (See Step 9.).

8. If you decide to cold work your bolt holes following Snow Engineering Service Letter 238 or 239, both dated September 30, 2004, at a TIS that does not coincide with a scheduled inspection following this AD, then eddy-current inspect at the time of cold working and then begin the

800/1,200/2000 hour TIS inspection intervals (2 times the intervals listed in Steps 2.a., 2.b., 2.c., and 6.a listed above).

9. If you have modified your airplane before accumulating 4,000 hours TIS, then you may continue to fly your airplane past (modification + 4,000 hours TIS) provided you cut your inspection intervals in half. Make a logbook entry following Step 6.c. to reflect these reduced inspection intervals. Upon accumulating 8,000 hours TIS, you must comply with Step 7 above. See example:

Example: An AT-402B had the two-part modification installed at 3,000 hours TIS and the bolt holes have not been cold worked.

The first inspection would occur at 4,600 hours TIS. From Step 5, this is modification plus 1,600 hours.

Inspections would follow at 5,600 and 6,600 hours TIS. From Step 6a, this is 1,000-hour TIS inspection intervals.

There is another inspection at 7,000 hours TIS (modification plus 4,000 hours TIS). This relates to the 8,000-hour TIS inspection from Step 7, which is modification plus 4,000 hours TIS, except in this example the modification took place at 3,000 hours TIS instead of 4,000 hours TIS listed in Step 4.

This airplane may continue to fly if inspected again at 7,500 hours TIS, which is 500 hours TIS. This 500-hour time corresponds to Step 9 where you cut your inspection interval from Step 6a in half.

Upon accumulating 8,000 hours TIS (this is the same as Step 7), you must replace the parts listed in Step 7 above.

For Model AT-402A airplanes, all S/N's beginning with 0952, and Model AT-402B airplanes, all S/Ns beginning with 0966, that incorporate or have incorporated Marburger winglets installed following STC No. SA00490LA; you may begin a repetitive inspection interval program as an alternative to the safe life requirement of this AD following the steps above with the following provisions:

If you have removed the winglets, then calculate new, reduced hours for Steps 1, 4, 5, and 7 above, as applicable, based on the winglet usage factor listed in paragraph (c)(4) and Appendix 2 of this AD.

You may repetitively inspect at the same intervals list in Step 2 above provided that you do not re-install the winglets.

Example: An AT-402B airplane, S/N 1020, had winglets installed at 200 hours TIS and removed at 800 hours TIS.

The winglet usage factor is: 1.1.

Calculate equivalent hours: 600 hours TIS with winglets x 1.1 = 660 hours TIS.

Winglet usage penalty = 660-600 = 60.

New Step 1 Pre-Modification Initial Inspection time = 1,600-60 = 1,540 hours TIS.

Retained Step 2 Pre-Modification Inspection interval: Since the winglets are removed, the Pre-Modification Inspection interval remains at 600 hours TIS.

New Step 4 Modification time = 4,000-60 = 3,940 hours TIS.

New Step 5 Post-Modification Initial Inspection time = 3,940 + 1,600 = 5,540 hours TIS.

Retained Step 6 Post-Modification Inspection interval: Since the winglets are removed the Post-Modification Inspection interval remains at 1,000/2,000 hours TIS.

New Step 7 Replacement time = 8,000-60 = 7,940 hours TIS.

Use the Retained Step 2 interval, the New Step 5 time, and the Retained Step 6 interval to make appropriate logbook entries for the pre- and post-modification intervals, using the format presented in Steps 2.e., 4.b., and 6.c.

If you have not removed the winglets, then calculate new, reduced hours for Steps 1, 2, 4, 5, 6, and 7 above, as applicable, based on the winglet usage factor listed in paragraph (c)(4) and Appendix 2 of this AD.

Repetitively inspect at the appropriate interval listed in the step above divided by the winglet usage factor.

Example: An AT-402B, S/N 1,000 has had winglets on since new.

The winglet usage factor is: 1.1.

New Step 1 Pre-Modification Initial Inspection time: $1,600 / 1.1 = 1,455$ hours TIS.

New Step 2 Pre-Modification Inspection interval: $600 / 1.1 = 545$ hours TIS.

New Step 4 Modification time: $4,000 / 1.1 = 3,636$ hours TIS.

New Step 5 Post-Modification Initial Inspection time: $3,636 + (1,600 / 1.1) = 5,090$ hours TIS.

New Step 6 Post-Modification Inspection interval: $1,000 / 1.1 = 909$ hours TIS.

New Step 7 Replacement time: $8,000 / 1.1 = 7,273$ hours TIS.

Use the reduced hours you calculate in New Step 2, New Step 5, and New Step 6 to make appropriate logbook entries for the pre- and post-modification inspection intervals, using the format presented in Steps 2.e., 4.b., and 6.c.

Issued in Kansas City, Missouri, on April 10, 2006.

David R. Showers,

Acting Manager, Small Airplane Directorate, Aircraft Certification Service.

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BILLING CODE 4910-13-M

**AIR TRACTOR
AIRWORTHINESS DIRECTIVE
SMALL AIRCRAFT, ROTORCRAFT, GLIDERS, BALLOONS, & AIRSHIPS**

CORRECTION: [*Federal Register: May 12, 2006 (Volume 71, Number 92); Page 27794-27795; www.access.gpo.gov/su_docs/aces/aces140.html*]

2006-08-09 Air Tractor, Inc.: Amendment 39-14565; Docket No. FAA-2005-20591; Directorate Identifier 2005-CE-14-AD.

When Does This AD Become Effective?

- (a) This AD becomes effective on April 21, 2006.

What Other ADs Are Affected by This Action?

(b) As of the issuance of this action, AD 2002-11-05 applies to Models AT-400, AT-401, AT-401B, AT-402, AT-402A, AT-402B, AT-501, AT-802, and AT-802A airplanes. The FAA is revising AD 2002-11-05 to remove the AT-400 series and AT-800 series airplanes from the applicability. The FAA is also issuing another similar AD on the AT-400 series airplanes.

What Airplanes Are Affected by This AD?

(c) This AD affects Model AT-802 and AT-802A airplanes, all serial numbers beginning with 802-0001, that are:

- (1) Certificated in any category;
- (2) Engaged in agricultural dispersal operations including those airplanes that have been converted between fire fighting and agricultural dispersal;
- (3) Not equipped with the factory-supplied computerized fire gate (part number 80540); and
- (4) Not engaged in full-time fighting only.

What Is the Unsafe Condition Presented in This AD?

(d) This AD is the result of fatigue cracking of the wing main spar lower cap at the center splice joint outboard fastener hole. The actions specified in this AD are intended to detect and correct cracks in the wing main spar lower cap, which could result in failure of the spar cap and lead to wing separation and loss of control of the airplane.

What Service Information Must I Use To Do the Actions Required by This AD?

(e) You must use the following Snow Engineering Co. service information to do the actions required by this AD:

- (1) Process Specification 197, page 1, revised June 4, 2002; pages 2 through 4, dated February 23, 2001; and page 5, dated May 3, 2002;
- (2) Process Specification 204, Rev. C, dated November 16, 2004;
- (3) Service Letter 215, page 5, titled "802 Spar Inspection Holes and Vent Tube Mod," dated November 19, 2003;
- (4) Service Letter 240, dated September 30, 2004;
- (5) Service Letter 244, dated April 25, 2005;
- (6) Drawing Number 20975, Sheet 2, Rev. A, dated September 1, 2004;
- (7) Drawing Number 20975, Sheet 3, dated January 6, 2005; and
- (8) Drawing Number 20995, Sheet 2, Rev. C., dated September 28, 2004.

What Must I Do To Address This Problem?

- (f) At the initial inspection time specified in paragraph (f)(2) of this AD, do the following:
 - (1) For the affected airplanes listed in Table 1 in paragraph (f)(2) of this AD, gain access for the required inspection listed below by installing cover plates following Service Letter 215, page 5, titled "802 Spar Inspection Holes and Vent tube mod," dated November 19, 2003.
 - (2) For the following airplanes, eddy current inspect the center splice joint outboard two fastener holes in both the right and left wing main spar lower caps for cracks following Process Specification 197. For these airplanes, use the following wing spar lower cap hours time-in-service (TIS) schedule to do the initial and repetitive inspections:

TABLE 1.—INSPECTION TIMES

Serial No.	Condition	Initially inspect:	Repetitively inspect thereafter at intervals not to exceed:
(i) 802–0001 through 802–0091.	As manufactured	Upon accumulating 1,700 hours TIS or within 50 hours TIS after April 21, 2006 (the effective date of this AD), whichever occurs later.	850 hours TIS.
(ii) 802–0001 through 802–0091.	Modified with cold-worked fastener holes following Service Letter #244.	If performing the cold-working procedure in Service Letter #244, it includes the eddy current inspection.	1,700 hours TIS.

- (3) One of the following must do the inspection:
 - (i) A level 2 or 3 inspector certified in eddy current inspection using the guidelines established by the American Society for Nondestructive Testing or MIL-STD-410; or
 - (ii) A person authorized to perform AD work and who has completed and passed the Air Tractor, Inc. training course on Eddy Current Inspection on wing lower spar caps.

(g) For all affected airplanes listed in paragraphs (f)(2)(i) and (f)(2)(ii) of this AD as terminating action for the inspection requirements, you may modify your wing by installing part number (P/N) 20997-2 web plate and P/N 20985-1 and 20985-2 extended 8-bolt splice blocks following Drawing 20995, Sheet 2, and cold-working the outboard two fastener holes in both the left and right hand lower spar caps at the center splice joint following Service Letter 240.

(h) For all affected airplanes listed in paragraphs (f)(2)(i) and (f)(2)(ii) of this AD, repair or replace any cracked spar cap before further flight after the inspection in which cracks are found. For repair or replacement, do whichever of the following that applies:

(1) For cracks that can be repaired by incorporating the terminating action specified in paragraph (g) of this AD, do the actions in paragraph (g) of this AD before further flight after the inspection in which cracks are found.

(2) For cracks that cannot be repaired by incorporating the terminating action specified in paragraph (g) of this AD, replace the lower spar caps and associated parts listed in paragraph (i) of this AD before further flight after the inspection in which cracks are found.

(i) For all AT-802 and AT-802A airplanes, upon accumulating the hours TIS on the wing spar lower caps listed in paragraph (i)(3) of this AD or within 50 hours TIS after April 21, 2006 (the effective date of this AD), whichever occurs later, replace the wing main spar lower spar caps, the center joint splice blocks and hardware, the wing attach angles and hardware, and install the steel web splice plate (P/N 21106-1 for serial numbers 0001 through -0091, and P/N 20094-2 for all serial numbers beginning with 0092), unless already done. Replace as follows:

(1) For airplane serial numbers 802-0001 through 802-0091, follow Drawing Number 20975, Sheet 3, and Process Specification 204.

(2) For airplane serial numbers beginning with 802-0092, follow Drawing Number 20975, Sheet 2, and Process Specification 204.

(3) The following presents the safe life and replacements times as required in paragraph (i) of this AD:

TABLE 2.—SAFE LIFE AND REPLACEMENT TIMES

Serial No.	Wing spar lower cap safe-life
AT-802-0001 through AT-802-0059	4,132 hours TIS.
AT-802-0060 through AT-802-0091	4,188 hours TIS.
All beginning with AT-802-0092	8,163 hours TIS.
AT-802A-0001 through AT-802A-0059	4,969 hours TIS.
AT-802A-0060 through AT-802-0091	4,531 hours TIS.
All beginning with AT-802A-0092	8,648 hours TIS.

(j) After replacing the wing spar lower caps and hardware, installing the web splice plate, and cold working the fastener holes by following Drawing Number 20975, Sheet 3 (serial numbers 802-0001 through 802-0091), or Sheet 2 (all serial numbers beginning with 802-0092), and Process Specification 204, the new safe-life for wing spar lower caps is as follows:

TABLE 3.—NEW SAFE LIFE FOR WING SPAR LOWER CAPS

Serial No.	Wing spar lower cap safe-life
All beginning with AT-802-0001	8,163 hours TIS.
All beginning with AT-802A-0001	8,648 hours TIS.

(k) Report any cracks you find within 10 days after the cracks are found or within 10 days after April 21, 2006 (the effective date of this AD), whichever occurs later.

(1) Include in your report the aircraft serial number, aircraft TIS, wing spar cap TIS, crack location and size, corrective action taken, and a point of contact name and phone number. Send your report to Andrew McAnaul, Aerospace Engineer, ASW-150 (c/o MIDO-43), 10100 Reunion Place, Suite 650, San Antonio, Texas 78216; telephone: (210) 308-3365; facsimile: (210) 308-3370.

(2) The Office of Management and Budget (OMB) approved the information collection requirements contained in this regulation under the provisions of the Paperwork Reduction Act and assigned OMB Control Number 2120-0056.

May I Request an Alternative Method of Compliance?

(l) The Manager, Fort Worth Airplane Certification Office, FAA, has the authority to approve alternative methods of compliance for this AD, if requested using the procedures found in 14 CFR 39.19. For information on any already approved alternative methods of compliance or for information pertaining to this AD, contact Andrew McAnual, Aerospace Engineer, ASW-150 (c/o MIDO-43), 10100 Reunion Place, suite 650, San Antonio, Texas 78216; telephone: (210) 308-3365; facsimile: (210) 308-3370.

(m) AMOCs approved for AD 2001-10-04, AD 2001-10-04 R1, or AD 2002-11-05 for the Models AT-802 and AT-802A airplanes are not considered approved for this AD.

Special Flight Permit

(n) Under 14 CFR part 39.23, we are allowing special flight permits for the purpose of compliance with this AD under the following conditions:

- (1) Only operate in day visual flight rules (VFR).
- (2) Ensure that the hopper is empty.
- (3) Limit airspeed to 135 miles per hour (mph) indicated airspeed (IAS).
- (4) Avoid any unnecessary g-forces.
- (5) Avoid areas of turbulence.
- (6) Plan the flight to follow the most direct route.

Does This AD Incorporate Any Material by References?

(o) You must do the actions required by this AD following the instructions in Snow Engineering Co. Process Specification 197, page 1, revised June 4, 2002; pages 2 through 4, dated February 23, 2001; and page 5, dated May 3, 2002; Snow Engineering Co. Process Specification 204, Rev. C, dated November 16, 2004; Snow Engineering Co. Service Letter 215, page 5, titled "802 Spar Inspection Holes and Vent Tube Mod," dated November 19, 2003; Snow Engineering Co. Service 240, dated September 30, 2004; Snow Engineering Co. Service Letter 244, dated April 25, 2005; Snow Engineering Co. Drawing Number 20975, Sheet 2, Rev. A, dated September 1, 2004; Snow Engineering Co. Drawing Number 20975, Sheet 3, dated January 6, 2005; and Snow Engineering Co. Drawing Number 20995, Sheet 2, Rev. C., dated September 28, 2004. The Director of the Federal Register approved the incorporation by reference of this service information in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. To get a copy of this service information, contact Air Tractor, Incorporated, P.O. Box 485, Olney, Texas 76374. To review copies of this service information, go to the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, go to:

http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html or call (202) 741-6030. To view the AD docket, go to the Docket Management Facility; US Department of Transportation, 400 Seventh Street, SW., Nassif Building, Room PL-401, Washington, DC 20590-0001 or on the Internet at <http://dms.dot.gov>. The docket number FAA-2005-20591; Directorate Identifier 2005-20591; Directorate Identifier 2005-CE-14-AD.

Issued in Kansas City, Missouri, on April 10, 2006.

David R. Showers,

Acting Manager, Small Airplane Directorate, Aircraft Certification Service.

[FR Doc. 06-3613 Filed 4-18-06; 8:45am]

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**EUROCOPTER FRANCE
AIRWORTHINESS DIRECTIVE
SMALL AIRCRAFT, ROTORCRAFT, GLIDERS, BALLOONS, & AIRSHIPS**

2006-09-10 Eurocopter France: Amendment 39-14581. Docket No. FAA-2006-24588; Directorate Identifier 2006-SW-07-AD.

Applicability

Model SA-365 N1, AS-365 N2, N3, SA 366 G1, and EC-155B and B1 helicopters, with a tail rotor (T/R) pitch control rod assembly double bearing (bearing) installed, certificated in any category.

Compliance

Required as indicated, unless accomplished previously.

To detect damage to the bearing resulting in end play and to prevent loss of T/R pitch control and subsequent loss of control of the helicopter:

(a) Within 50 hours time-in-service, inspect the T/R hub control plate for end play in the bearing in accordance with paragraph 2.B., Operational Procedure, in Eurocopter Alert Service Bulletin No. 05.00.52, applicable to Model SA-365 N1 and AS-365 N2 and N3 helicopters; No. 05.36, applicable to Model SA 366 G1 helicopters; and No. 05A013, applicable to Model EC-155B and B1 helicopters, dated February 15, 2006 (ASBs).

(b) If end play is present, before further flight, replace the bearing with an airworthy bearing. You are not required to contact the manufacturer to meet the requirements of this AD.

(c) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Contact the Manager, Regulations Group, Rotorcraft Directorate, FAA, ATTN: Uday Garadi, 2601 Meacham Blvd., Fort Worth, Texas, 76193, telephone (817) 222-5123, fax (817) 222-5961, for information about previously approved alternative methods of compliance.

(d) Special flight permits will not be issued.

(e) The inspection and replacement, if necessary, shall be done in accordance with the specified portions of Eurocopter Alert Service Bulletin No. 05.00.52, applicable to Model SA-365 N1 and SA-365 N2 and N3 helicopters; No. 05.36, applicable to Model SA 366 G1 helicopters; and No. 05A013, applicable to Model EC-155B and B1 helicopters, dated February 15, 2006. The Director of the Federal Register approved this incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from American Eurocopter Corporation, 2701 Forum Drive, Grand Prairie, Texas 75053-4005, telephone (972) 641-3460, fax (972) 641-3527. Copies may be

inspected at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:
http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

(f) This amendment becomes effective on May 18, 2006.

Note: The subject of this AD is addressed in European Aviation Safety Agency (EASA) AD No. 2006-0051-E, dated February 20, 2006.

Issued in Fort Worth, Texas, on April 17, 2006.

David A. Downey,

Manager, Rotorcraft Directorate, Aircraft Certification Service.

[FR Doc. 06-4108 Filed 5-2-06; 8:45 am]

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